

REMARKS

Claims remaining in the present patent application are numbered 1-24. The rejections and comments of the Examiner set forth in the Office Action dated June 18, 2003 have been carefully considered by the Applicants. Applicants respectfully request the Examiner to consider and allow the remaining claims.

35 U.S.C. §102 Rejection

The present Office Action rejected Claims 1-5, 14-15, and 19-22 under 35 U.S.C. 102(e) as being anticipated by Yokota et al. (U.S. Patent No. 6,181,313). Applicants have reviewed the above cited references and respectfully submit that the present invention as recited in Claims 1-24, is neither anticipated nor rendered obvious by the Yokota et al. reference.

Independent Claims 1, 13 and 19

Applicants respectfully point out that independent Claim 1, 13 and 19 each recite that the present invention includes, in part:

[A] display unit comprising:
. . . .
a passive matrix . . .; and
a pixel border having a predetermined width,
said pixel border surrounding said passive matrix

and comprising a plurality of pixels which are uniformly controlled between an on and off state by a common threshold signal. (Emphasis Added)

An embodiment of the present invention pertains to a controllable pixel border for a negative mode passive matrix display device. In particular, independent Claims 1, 13, and 19 recite that a pixel border surrounds the passive matrix. In addition, the pixels of the pixel border are uniformly controlled between an on and off state by a common threshold signal.

Applicants respectfully note that the prior art reference, Yokota et al., does not teach nor suggest the present display unit that includes, in particular, the pixel border that surrounds a passive matrix, and is uniformly controlled between an on and off state by a common threshold signal, as claimed in independent Claim 1 of the present invention.

In contrast to independent Claims 1, 13, and 19 of the present invention, the Yokota et al. reference, discloses a liquid display controller that can select part of the rows of a liquid crystal panel for display, such that the display is selectively produced on a portion of the liquid crystal display panel at a low voltage with a low-duty drive. In particular, the Yokota et al. reference, discloses a display unit comprising a liquid crystal panel that is capable of

producing a display of up to four rows (see Figure 9 of the Yokota et al. reference).

The Yokota et al. reference is able to select rows in a liquid crystal panel for displaying an image, such that, the common drive signal is not applied to the rows in which no display is produced. That is, non-display rows are in a stand-by state. This allows the display in the Yokota et al. reference to decrease the amount of power consumed by the liquid crystal display. Selection of rows is implemented through flip-flops. (See Yokota et al. reference, col. 8 line 65 to col. 9, line 5). That is, all of the rows in the Yokota et al. reference are capable of generating an image for display. Also, any of the rows are selectable to not produce an image for display. As such, the Yokota reference does not disclose a pixel border, but a display region that can partially select rows in the display to not display images. In addition, the Yokota et al. reference does not disclose a pixel border that surrounds a passive matrix for display with a common on/off control signal, since any two rows of the display can at best border two horizontal sides of one or more rows of the display.

This embodiment of the present invention, on the other hand, claims a display unit that has distinct display and border regions, in independent Claims 1, 13, and 19. In particular, independent Claims 1, 13, and 19 of the present

invention each discloses a passive matrix region that is operable to generate an image. Distinctively, the present invention also discloses a separate pixel border that surrounds the passive matrix. As such, the passive matrix region generates an image, and the pixel border surrounds the image in the passive matrix, and the pixels thereof are uniformly controlled between an on and off state by a common threshold signal to provide sufficient contrast to any image displayed near the border, as disclosed in independent Claims 1, 13, and 19 of the present invention.

Thus, Applicants respectfully submit that embodiments of the present invention as disclosed in independent Claim 1 are not anticipated by the Yokota et al. reference, and is in a condition for allowance. In addition, Applicants respectfully submit that Claims 2-12 which depend from independent Claim 1 are also in a condition for allowance as being dependent on an allowable base claim.

Similarly, Applicants respectfully submit that the present invention as disclosed in independent Claim 13 is not anticipated by the Yokota et al. reference, and is in a condition for allowance. In addition, Applicants respectfully submit that Claims 14-18 which depend from independent Claim 13 are also in a condition for allowance as being dependent on an allowable base claim.

In addition, Applicants respectfully submit that the present invention as disclosed in independent Claim 19 is not anticipated by the Yokota et al. reference, and is in a condition for allowance. In addition, Applicants respectfully submit that Claims 20-24 which depend from independent Claim 19 are also in a condition for allowance as being dependent on an allowable base claim.

35 U.S.C. §103 Rejection

The present Office Action rejected Claims 6, 9, and 10 under 35 U.S.C. 103(a) as being unpatentable over Yokota et al. in view of Morimoto (U.S. Patent No. 6,535,188). Also, Claims 11 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yokota et al. in view of Maher (U.S. 5,559,529). In addition, Claims 12, 18, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yokota et al. in view of Flack et al. (U.S. 6,288,704). Further, Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yokota et al. in view of Colgan et al. (U.S. 6,323,834). Moreover, Claims 8, 16, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yokota et al. in view of Lin et al. (U.S. 6,064,359). Applicants have reviewed the above cited references and respectfully submit that the present invention as recited in Claims 1-24, is neither anticipated nor rendered obvious by the Yokota et al.

reference taken alone or in combination with the Morimoto, Maher, Flack, Colgan et al. and Lin et al. references.

Applicants respectfully submit that the present invention as disclosed in dependent Claims 6, 8-12, 16-18, 23 and 24 are not anticipated by the Yokota et al. reference, taken alone or in combination with the Morimoto, Maher, Flack, Colgan et al. and Lin et al. references since they depend on allowable base Claims 1, 13, and 19, as previously discussed. As such, dependent Claims 6, 8-12, 16-18, 23 and 24 are in a condition for allowance as being dependent on allowable base claims, 1, 13, and 19.

CONCLUSION

In light of the facts and arguments presented herein, Applicants respectfully request reconsideration of the rejected Claims.


Based on the arguments presented above, Applicants respectfully assert that Claims 1-24 overcome the rejections of record. Therefore, Applicants respectfully solicit allowance of these Claims.

The Examiner is invited to contact Applicants' undersigned representative if the Examiner believes such action would expedite resolution of the present Application.

Respectfully submitted,

Wagner, Murabito & Hao LLP

Date: 20 October 2003



Lin C. Hsu

Reg. No.: 46,315

Two North Market Street

Third Floor

San Jose, California 95113